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**Section 3:**  
**Health-Related Fitness Assessment**

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## SECTION 3: HEALTH-RELATED FITNESS ASSESSMENT ■

### **Fitness Assessment: A Positive Approach**

Physical fitness assessment can be an integral part of a comprehensive physical education program when used as a means to teach fitness concepts and their relationship to health, work, and quality of life. If properly approached, fitness assessment can provide objective information and motivation for students. Assessment of student fitness involves selection of fitness tasks, student preparation, interpretation of results, and follow-up.

#### **Selection**

Although this resource suggests the use of specific fitness tasks, teachers are encouraged to acquaint themselves with alternatives. Discuss alternative tasks with students to allow them some choice as long as the underlying purpose or goal is achieved.

#### **Preparation**

Ensure that students are prepared to participate in fitness assessment and are able to understand the value of fitness assessment tasks.

- Discuss fitness concepts with students, demonstrate assessment procedures, and encourage self-motivation techniques, stressing the importance of doing the best they can as individuals.
- Ensure that students experience progressive activity before administering the fitness task. Teach warm-up, cool-down, and pacing concepts, and provide students with practice opportunities.
- Present students with a time-flexible schedule to allow maximum opportunities for assessment. This will accommodate students who are absent from class, on medication, not feeling well, or wanting to be reassessed.
- Screen students for medical conditions before they participate in the assessment schedule.

#### **Interpretation**

Discuss fitness results immediately after the assessment has been completed. If possible, counsel students with low fitness scores individually. Results should not be used for grading in physical education. Reporting to parents/guardians is desirable.

#### **Follow-up**

Design instructional and intramural programs to help address students' low fitness levels. Personalize fitness plans, where possible, and encourage self-assessment. Schedule periodic assessments in order to review each student's improvement during the year.

## **Intended Use of Health-Related Fitness Assessment Tasks**

Recent research (Corbin & Pangrazi, 1998; Graham, 2001; Rainey & Murray, 1997; Virgilio, 1997) indicates that fitness assessment or testing should focus on setting and achieving personal goals, developing fitness-management skills, and following a personal fitness plan. Programming needs to emphasize education, prevention, and intervention. Fitness assessment or testing is primarily used to establish personal goals and monitor individual progress rather than to compare one person's results to those of others, as in norm-referenced testing.

### **Personal Fitness Assessment**

Personal fitness assessment is the main purpose of the fitness assessment tasks. Encourage students to self-administer the task(s) to promote the likelihood that they will continue to assess themselves throughout life. (It is not necessary to assess all the health-related fitness components each time an assessment is done.) Give students opportunities to practise their self-assessment since results for beginning self-assessors are not particularly accurate. As interpretation of the results is essential, spend sufficient time teaching students how to interpret their results clearly. Results should be kept personal if a student desires.

### **Teach Fitness Development Concepts**

Teachers are encouraged to use the fitness assessment tasks to teach fitness concepts. For example, during the 1600-metre walk, use heart-rate measurement to teach the concepts of exercise intensity, pacing, and/or heart-rate palpation.

## **Potential Misuse of Health-Related Fitness Assessment Tasks**

When reporting on fitness assessment, communicate results or scores as information separate from the report card mark. Help students to focus on individual progress rather than on individual performance and involve them in setting challenging and realistic goals.

### **Using Fitness Scores As a Basis for Student Grading**

Teachers are encouraged to assess students on their ability to self-administer fitness assessment tasks and interpret their personal results rather than grading them on fitness scores. When student grades are based on student fitness scores, dishonesty on fitness assessments becomes a problem. Grading based on improvement (i.e., comparison of pre- and post-assessment) is also invalid, as students typically improve regardless of whether they are doing physical activity, just because they are getting older (maturation effect). Furthermore, a higher fitness score is not necessarily "more" desirable if the score is already considered healthy based on criterion-referenced standards. Students who engage in regular physical activity but do not do well on fitness assessments will likely be "turned off" to physical activity when fitness scores determine their grades.

### Using Fitness Scores As a Measure of Physical Activity Outcome or Teaching Effectiveness

Many factors other than activities performed in physical education classes influence fitness scores; therefore, fitness scores do not reflect the time spent doing physical activity. Also, if teaching effectiveness is determined by fitness scores, teachers may have the tendency to become “fitness instructors” rather than physical educators. This may cause students to dislike rather than like physical education.

### Using Fitness Assessment Tasks in the Early Years

The development and teaching of fitness skills and concepts is an important aspect of the Early Years curriculum. However, formal fitness assessment is not recommended prior to Grade 4 for the following reasons:

- Fitness scores are typically unreliable in this age group.
- Young students have little understanding of the meaning of results.
- Administration of the fitness task(s) is difficult, if not impossible.
- Motivation for fitness task assessment is lacking due to short attention spans and a strong play urge.
- Criterion-referenced standards are typically not available for students below the age of 10.

Most of these problems are alleviated after the Early Years, as students are then physically and mentally ready for fitness assessment. They can also score each other and assist in administration. Motivation likewise becomes easier, as students are better able to understand a given task and can focus on it. Most importantly, students gain insight into the value and life benefits of physical fitness.

### Criterion-Referenced Versus Norm-Referenced Assessment

In the past, most of the published fitness assessment results were norm-referenced. Although norm-referenced assessment was popular and easy to interpret, it fell short when defining the health of individuals. For example, a “normal” or “average” (i.e., 50th percentile) score in 2003 might mean an individual is overweight. Criterion-referenced standards attempt to overcome this inadequacy by indicating the score on a selected fitness test that represents desirable and absolute levels needed for good health (Plowman, 1992). In other words, criterion-referenced standards answer the question “How fit is fit enough?”

Although criterion-referenced standards are favoured over norm-referenced standards, most of the existing criterion-referenced standards have been derived exclusively from normative data and expert opinion (Plowman, 1992). Criterion-referenced standards are in the developmental phase and will require much more investigation before scientifically justified standards are available.

## **Inclusive Fitness Assessment**

Inclusive PE/HE programming can contribute to the development of responsibility, citizenship, community, and personal fitness through physical activity participation. All students, including those with special needs, have opportunities to develop the knowledge, skills, and attitudes required for physically active and healthy lifestyles.

In planning for inclusion, educators need to recognize the inherent value of each student, the right to take risks and make mistakes, the need for independence and self-determination, and the right of choice. Inclusive PE/HE programming

- includes all students
- uses the provincial PE/HE curriculum as a base
- respects the learning needs and interests of individual students
- involves planning and collaboration with others
- provides a range of learning and assessment experiences and supports
- considers the continuum of instructional supports for individualized programming
- personalizes learning activities as necessary
- adapts fitness tasks and assessment to meet individual student needs
- sets realistic, yet challenging expectations
- provides assistance only to the degree required
- respects and fosters a degree of risk and availability of choices

For additional information on planning for inclusion, refer to “Appendix C: Programming for Students with Special Needs” in Manitoba’s *Foundation for Implementation* documents for Kindergarten to Grade 4, Grades 5 to 8, and Senior 1 and Senior 2. Also refer to *Individual Education Planning: A Handbook for Developing and Implementing IEPs, Early to Senior Years* (Manitoba Education and Training, 1998). For information on differentiated instruction, see *Success for All Learners: A Handbook on Differentiating Instruction* (Manitoba Education and Training, 1996).

## **Administrative Suggestions**

Consider the following suggestions when arranging for assistance in administering fitness tasks, scheduling assessment, maximizing use of resources, and creating an atmosphere of motivation.

### **Arrange for Assistance**

When planning the administration of fitness tasks, consider assistance from

- student leaders (credit option and older students)
- other classroom teachers
- volunteer parents (training may be required)

### **Schedule Assessment for Best Use of Time**

To make the best use of time, consider scheduling assessment

- during regular physical education classes
- before, after, and/or during the noon hour
- continually during the year so that students may be assisted regularly
- at times appropriate for student self-assessment
- as homework assignments to be completed with the support of parents (best suited to students reluctant to be assessed)

### **Plan to Maximize Use of Resources**

To maximize use of resources,

- use a circuit approach that allows student rotation
- use larger time blocks and staff assistance (e.g., assess several classrooms at one time, assess the entire school in one day)
- prepare students and provide a “trial” run
- prepare score sheets
- be consistent

### **Foster Motivation**

To create an atmosphere of motivation,

- be sensitive to issues related to self-esteem, body size, and weight
- provide encouragement
- create a relaxed, friendly environment
- play music
- offer choice in activities whenever possible
- use alternative assessment venues (e.g., multi-purpose room)
- encourage staff to be assessed along with the students

**Notes**